

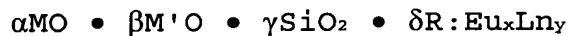
Amendments of the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) Light-storage self-luminescent glass, comprising from 0.01% to 40% by weight of a light-storage self-luminescent material activated by multiple ions and from 99.99% to 60% by weight of a matrix glass; wherein the light-storage self-luminescent material has a particle size from ~~10 μ m~~ 0.55 mm to 20 mm, and the matrix glass is selected from the group consisting of low melting point glass or common silicate glass, and other conventional borate glass, phosphate glass, halide glass, sulfide glass and aluminate glass.

2. (original) Light -storage self-luminescent glass according to claim 1, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein M is one or more selected from the group consisting of Sr, Ca, Ba and Zn;

M' is one or more selected from the group consisting of Mg, Cd and Be;

R is B_2O_3 , P_2O_5 or mixture thereof;

Ln is one or more selected from the group consisting of Nd, Dy, Ho, Tm, La, Pr, Tb, Ce, Er, Mn, Bi, Sn and Sb; and

α , β , γ , δ , x and y are molar coefficients meeting following requirement: $0.6 \leq \alpha \leq 6$; $0 \leq \beta \leq 5$; $1 \leq \gamma \leq 9$; $0 \leq \delta \leq 0.7$; $0.00001 \leq x \leq 0.2$; $0 \leq y \leq 0.3$.

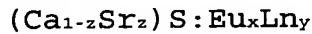
3. (original) Light -storage self-luminescent glass according to claim 2, wherein the main chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein Ln is one or more selected from the group consisting of La, Ce, Dy, Tm, Ho, Nd, Er, Sb and Bi;

z is a coefficient: $0 \leq z \leq 1$; and
x and y are molar coefficients: $0.0001 \leq x \leq 0.2$; $0.0001 \leq y \leq 3.0$.

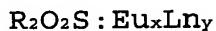
4. (original) Light -storage self-luminescent glass according to claim 1, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein Ln is one or more selected from the group consisting of Er, Dy, La, Tm and Y;

z is a coefficient: $0 \leq z \leq 1$; and
x and y are molar coefficients meeting following requirement: $0.00001 \leq x \leq 0.2$; $0.00001 \leq y \leq 0.15$.

5. (original) Light -storage self-luminescent glass according to claim 1, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein R is one or more selected from the group consisting of Y, La and Gd;

Ln is one or more selected from the group consisting of Er, Cr, Bi, Dy, Tm, Ti, Mg, Sr, Ca, Ba and Mn; and

x and y are molar coefficients meeting

following requirement: $0.00001 \leq x \leq 0.2$; $0.00001 \leq y \leq 0.6$.

6. (original) Light -storage self-luminescent glass according to claim 1, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:

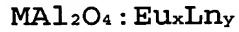


wherein M is one or more selected from the group consisting of Mg, Ca, Sr and Zn;

Ln is one or more selected from the group consisting of Nd, Dy, Ho, Tm, La, Ce, Er, Pr and Bi; and

α , β , γ , x and y are molar coefficients meeting following requirement: $0.5 \leq \alpha \leq 6$; $0.5 \leq \beta \leq 9$; $0 \leq \gamma \leq 0.3$; $0.00001 \leq x \leq 0.15$; $0.00001 \leq y \leq 0.2$.

7. (original) Light -storage self-luminescent glass according to claim 6, the chemical formula of the light-storage self-luminescent material is:

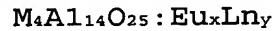


wherein Ln is one or more selected from the group consisting of La, Ce, Dy, Ho, Nd and Er;

M is one or more selected from the group consisting of Sr, Ca, Mg and Zn; and

x and y are molar coefficients: $0.0001 \leq x \leq 0.15$; $0.0001 \leq y \leq 0.2$.

8. (original) Light -storage self-luminescent glass according to claim 6, wherein the chemical formula of the light-storage self-luminescent material activated by multiple ions is:



wherein Ln is one or more selected from the group consisting of Pr, Ce, Dy, Ho, Nd and Er;

M is one or more selected from the group consisting of Sr, Ca, Mg and Zn; and
x and y are molar coefficients: 0.0001 ≤ x ≤ 0.15; 0.0001 ≤ y ≤ 0.2.

9. (canceled)

10. (currently amended) Light -storage self-luminescent glass according claim 1, wherein the ~~conventional~~ common silicate glass consists of following components (by weight):

SiO ₂ : 30-81%	CaO: 0.5-9%
Al ₂ O ₃ : 0-23%	MgO: 1-8%
B ₂ O ₃ : 0-15%	SrO: 1-10%
Li ₂ O: 0-8%	BaO: 0-16%
Na ₂ O: 0.6-18%	ZnO: 0.6-55%
K ₂ O: 0.4-16%	PbO: 0-33%
As ₂ O ₃ : 0-0.5%.	

11. (canceled)

12. (currently amended) A process for producing the light-storage self-luminescent glass according to claim [[11]] 1, wherein comprising:
doping the light-storage self-luminescent material ~~is doped~~ into the melted matrix glass to produce a mixture; and
forming the mixture ~~is formed~~ at 900-1300°C ~~during the forming process~~.

13. (currently amended) A process for producing the light-storage self-luminescent glass according to claim [[11]] 1, wherein comprising:
re-heating and melting a glass which has been formed and cooled; is re-heated and melted by a glass blower, and
doping the glass doped with the light-storage self-luminescent material before secondary forming.

14-15. (canceled)